

Lab 8: Bayesian Calibration

Turing.jl inference setup, Prior specification for hydro parameters, MCMC sampling and diagnostics

CEVE 543 Fall 2025

2025-10-24

1 Objectives

1. Set up Bayesian inference for hydrological model parameters
2. Specify appropriate priors for hydrological parameters
3. Run MCMC sampling and perform convergence diagnostics

2 Before

! Instructions

Do this before the lab date so that lab itself can go more smoothly.

3 Background and Reading

4 Tasks

Modify the code section below to address the following tasks.

1. Set up Bayesian inference framework for hydrological model parameters
2. Specify appropriate prior distributions for hydrological parameters
3. Run MCMC sampling chains and perform convergence diagnostics
4. Analyze posterior parameter distributions and assess calibration quality

5 Code

Bibliography